with the known cultural methods and did not cause sickness when injected into white mice. An emulsion of this sterile gland, injected into a healthy ape, produced fever up to 39.9° C. after four days and general glandular enlargement. The tongue was heavily coated and there was erythema of the skin of the face, neck, and shoulders. The next day the skin all over the body began to desquamate, the tongue assumed the raspberry appearance, the temperature was 34.5° C. In subsequent days the skin desquamated in large scales and the animal made a good recovery. Bernhardt observed the same clinical signs after injecting scarlatinal material containing streptococci, but inoculation of a pure culture of streptococci produced not even a remote resemblance to this clinical picture. Emulsions of the tongue epithelium were now passed through a Berkefeld filter and the filtrate used for inoculations. Of four animals infected, two developed symptoms like those just enumerated, strongly suggesting scarlet fever of human beings. Recently, the author has succeeded in reproducing the same symptoms by simply rubbing the emulsion on the oral mucosa of the animal. Blister fluid obtained from a patient with scarlet fever, when injected subcutaneously into a monkey, reproduced the symptoms of scarlet fever, with a glomerular nephritis. An emulsion made from the mesenteric gland of a child dead of scarlatina caused scarlatinoid symptoms in six days in the animal, which, however, died of septicemia on the thirteenth day. In all, Bernhardt has made nineteen inoculations, and in fourteen of the animals he has observed symptoms like those of scarlet fever. Finally, in the lymph glands of human and experimental material, the author has seen inclusions which closely resemble trachoma bodies. His conclusions follow: (1) In the initial coating of the tongue, in the lymph channels of the skin, and in the lymphatic glands of scarlet fever patients a virus is present which, when injected into lower apes, after a variable incubation time, may produce a disease which resembles scarlatina of man in all essential points. (2) The virus, in the absence of bacteria, is capable of causing the same disease in other apes. (3) The portal of entry may be the oral cavity. There need be no lesion of the mucosa. (4) In all probability the virus is filterable.

A New Method of Percussing the Lung Apices.—J. Plesch (*Deut. med. Woch.*, 1911, xxxvii, 825) proposes a new method of percussing the apices of the lungs. The first rib encircles one-half of the lung apex and, with the sternum and first cervical vertebra, forms the superior thoracic aperture. Anteriorly, the lung apices extend 1½ cm. above the first rib, while posteriorly the rib is ½ cm. above the lung. The first rib is directly attached to the manubrium sterni; the articulation is broad and, in most cases, direct, whereas the second rib articulates with both the manubrium and corpus sterni. Therefore, when the manubrium sterni is percussed, the vibrations are transmitted throughout the first ribs, and, since the latter are in apposition with the apices of the lungs, the apices resonate. Thus, in percussing the manubrium, one obtains the mixed percussion note of both apices. If, now, one places a hand on one apex while the manubrium is percussed, the percussion note obtained is that of the free apex. In Plesch's method, the left hand is placed over the infraclavicular space close to the clavicle and with the middle finger of the right hand the manubrium sterni is lightly percussed. The upper edge of the sternum (incisura semilunaris sterni) should be the part percussed, since it possesses a scanty covering of soft parts, even in adipose individuals. Naturally, the force of percussion stroke must be equal in comparing the two sides. To eliminate the sound from one apex, it is not necessary to exert very strong pressure with the hand. Indeed, it is sufficient to press the finger tips of the left hand into the first intercostal space. One of the advantages of this method of percussion is that the percussion note is uninfluenced by the relative muscular development of the two sides. Again, Plesch says, a lesion in any part of the apex alters the note, since the whole apex is percussed with one stroke. It is particularly in very early cases of tuberculosis that the method is of value; with bilateral apical disease it is less helpful. Plesch recommends this method as an adjuvant to the present methods of percussing the apices.

On Vertebral and Left-sided Paravertebral Liver Dulness.—P. Grocco (*Wein. klin. Woch.*, 1911, xxiv, 667) describes an area for percussing the liver which is not mentioned in the text books on physical diagnosis and is apparently new. It is generally recognized that the upper border of liver dulness begins posteriorly at the tenth intercostal space and extends from the middle line around the thorax to the right, crossing the midsternal line and ending midway between the left parasternal and mammillary lines. Grocco finds that the upper border of absolute liver dulness also crosses the posterior middle line, and normally extends $3\frac{1}{2}$ to 5 cm. to the left of it. In childhood it extends relatively farther to the left than in adults. In case the liver or its left lobe becomes enlarged, the upper border of absolute liver dulness may extend 7 to 10 or even 12 cm. to the left. Grocco has demonstrated the left-sided dulness posteriorly in over 300 examinations and also by Röntgen ray studies and postmortem findings. To demonstrate the dulness, one percusses from above downward along the right paravertebral line, then along the spinous processes, and finally to the left of the vertebræ, marking the points at which pulmonary resonance ceases and liver dulness begins. Then, beginning well outside the left scapular line, one percusses toward the vertebræ, working along the line of dulness, to determine the extent of hepatic dulness to the left. This is measured. There are many useful applications of this procedure. By means of it Grocco diagnosticated a small abscess of the left lobe which gave no other physical signs. In determining whether dulness at the right base is pulmonary or hepatic in origin, a comparison of the level of dulness on either side of the vertebræ is usually conclusive.

Experimental Measles in the Monkey.—J. F. Anderson and J. Goldberger (*Public Health Report, U. S. Mar. Hosp. Serv.*, Washington, 1911, xxvi, 887) have added a supplemental note to their recent report on experimental measles in the monkey (*Ibid.*, 1911, xxvi, 847). They have inoculated defibrinated human blood, obtained within thirty-two hours after the eruption of measles, into rhesus monkeys. The inoculations were intraperitoneal, subcutaneous, intracerebral, or intravenous. In certain of the animals they obtained well-